Serial No.: 10/542,530

ABSTRACT

A plant is provided for the melting of primary and secondary aluminium, provided with a rotating furnace, internally equipped with a spiral element (11), that causes the melting of the aluminium not requiring use of a salty bath. The plant includes a pouring channel (13) adjacent an exit hole (4) of the rotating furnace and material from the pouring channel enters the spherical store basin (16) positioned below if, the spherical store being equipped with a rotating joint (17) having a common inclination with the pouring channel (13) so that what is obtained is the direct and continuous flow of the fused metal in the spherical store without interruption of the process of melting. The plant is also equipped with an automatic and continuous system of selection and recovery of the slag of fusion, integrated in the same plant, and a double system of canalization of the gases that allows cleaning of the pollutant agents and energy conservation in the melting furnace.